CAPITALIZATION VERSUS PRODUCTIVITY: REJOINDER

Dr. Brown's restatement of the productivity theory of interest has one distinctive merit.[1] It abandons the attempt to make a fallacious enterprise-profit rate of productivity an element in the explanation. Every previous formulation, not excepting Dr. Brown's own, has been open to this charge. The recent discussion has yielded a substantial result in this admission that the productivity theorist is bound to show the existence of a definite rate of physical productivity to which the rate of interest conforms, quite apart from any borrowing producers' rate of profit. Dr. Brown courageously undertakes this task, and his results must be judged by this criterion.

At the same time, however, he prudently limits his defense to the very narrowest scope that ever has been claimed for the theory. He makes a virtue of eclecticism (p. 349), and claims for productivity only a little part, an irreducible minimum. In the manner much in vogue since Böhm-Bawerk led the way, he concedes much of the field to the purely psychological explanation. Interest admittedly would exist in a world of desires and mere scarcity, without physical productivity, either direct or indirect for that matter. The capitalization theory alone could apply in such cases. It is admitted further that time-preference exists in every case, as well where there is as where there is not physical production of indirect agents. The claim Dr. Brown makes now is merely that when a physically productive process is employed to create an indirect agent, *then* the rate of productivity which he believes is involved *may* assume the dominant role and determine the rate of time-preference. I say "*may* assume," not necessarily assumes, for here the claim is narrowed astonishingly as compared with previous versions of the productivity theory. In previous versions the supposed regulative rate has been believed to dominate wherever there was an indirect (roundabout) process. In Dr. Brown's version this claim is limited to situations where fruits are being produced *at the same time*, in the same economy, by labor used in two different technical processes, one direct and the other indirect, one productive of more, the other of fewer

[1] American Economic Review, June, 1914, p. 340, in reply to my article on "Interest Theories, Old and New," in the Review for March, 1914.

physical fruits. Of this, more later. I note it here only to show how large a field has been conceded to the capitalization theory in productivity's masterly retreat. Dr. Brown has here probably tricked himself quite as much as his readers. He is defending a mere shadow of the old doctrine.

In still another respect Dr. Brown attempts (as he says on page 340 was his purpose in his former article) to limit the productivity theory, namely by treating it not as a part of the value-theory, but as dealing "with quantities of goods instead of with values." It is no minor matter to which I am here directing the reader's attention. It concerns the whole conception of the problem. The proposition speaks a different language from that of an interest-theory, and concerns a different question. So long as Dr. Brown limits his attention to amounts of income as absolute quantities, he is in the realm of the rent-, or more broadly, of the income-problem. This is arguing at cross purposes with the capitalization theory, and is not within range of the interest problem. A theory of interest must be *essentially* a value-theory. The thing to be explained is the ratio between the value of the income and the value of the income-bearer. There is a courageous logic, to a certain point, in Dr. Brown's attempt. The only way the productivity theory could be saved from the vicious circle would be to find a rate inherent in the physical process, in the relation between *quantities* of future goods and *quantities* of indirect agents, independent of the value-expression. But this attempt is vain. Fruits can be expressed for economic purposes as a percentage of trees not as physical quantities, but only as value-relations in terms of some standard. Usually the money-standard is chosen: Dr. Brown chooses a present-fruit value standard and does not see that he is doing it. To say that 1,000 present fruit *equals* 1,100 future fruit is to express a value relation. Equal how? Evidently not in quantity, for they are unequal, but in value. It is a psychological not a physical ratio. If, now, the productivity part of the problem be considered, 10 present trees equal 1,100 future fruit. Again we ask, equal in what way? Evidently not in quantity, but only in value? Where then is the ten per cent ratio? The answer comes that 10 present trees equal 1,100 future fruit and *at the same time* equal 1,000 present fruit; herein lies a ten per cent rate of productivity. A certain value of labor invested in trees yields a ten per cent value surplus at the end of a year. Enter the value relation disguised as a rate of physical productivity.

One who for years has trailed the elusive cost-of-production fallacy, can not fail to see in Dr. Brown's novelty the old illusion in a very thin new disguise. It is a very versatile and persistent fallacy. Böhm-Bawerk effectively exposed the old form of the doctrine, and then, as every student now knows, fell into the same pit when he formulated his own positive theory. Whoever lays claim to the discovery of some slightly different device for squaring this circle, opens up anew for himself, if not for others, all the old puzzling questions. To answer all the doubts reawakened in his mind it would be necessary to resurvey the whole wide field of the interest-controversy. Space will be taken for only one other brief criticism (among many possible), but that one alone destructive of Dr. Brown's central conception of a regulative rate of physical productivity. With this I will be content to rest, for the present, the case for the capitalization theory.

The semblance of a rate of physical productivity which Dr. Brown discovers, appears only when, side by side, two methods of production are in use, one new and the other old. As long as the two methods so continue, a unit of labor has equal value whether applied to present fruit or to trees; but how long can this continue? Only so long as the rate of time-preference happens to coincide with this so-called rate of productivity. Time-preference existed before the new method was discovered; it continues to exist afterward. If when the new technical method is discovered in the assumed case, time-preference happens to be over ten per cent, the new method is uneconomic and can not be adopted; if it happens to be under ten per cent then the old method is uneconomic and must be abandoned as fast as the shift can be made. Time-preference dominates the choice among technical methods. When *all* the fruit comes to be obtained by the roundabout method, and the supply of present fruit is 1,100 a year, where is the supposed regulative ten per cent ratio of physical productivity? It does not exist. Abandoned methods of production simply do not function in fixing either the present price of goods (either trees or fruits) or the rate of time-preference. The abandoned method becomes ancient history. Time-preference must be adjusted in the new conditions—a more bountiful environment. (In my former article I touched upon the probability as to the rate of time-preference in such a case.) There is greater productivity than before but no "*rate* of productivity" whatever, is the sense of Dr. Brown's theory. The capitalization

theory is alone left to explain the rate of interest in this situation, and time-preference never ceases to function.

Now and then in a maladjusted economy the interest rate might be found to coincide with this curious phenomenon which Dr. Brown believes to be a rate of physical productivity. It is only the semblance of such a rate, being but the reflection of a rate of time-preference when an indifferent choice is possible between a direct and an indirect method of production. This is always but a limited aspect of a dynamic situation (where I have always recognized that it has a place), which in the theory before us is hopelessly confused with the static problem of interest.

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